Acute lymphoblastic Leukaemia

Age at Diagnosis: 4 year

Presentation: 4 yr

Initial TLC: 5.7 k

CXR: >1/3 Yes/No

Liver: Bulky Yes/No

Spleen: Bulky Yes/No

B/L testis: normal/Enlarged

Bone Marrow/Peripheral blood: BM - 95% Blasts
PB - 77% Blasts

Flowcytometry/IPF: CALLA pos B CELL ALL

Cytogenetics: Awaited

0g 1st CSF: TLC/DLC/RBCs

Malignant cells

Day 8 Absolute Blast Count

Day 35: Bone Marrow

MRD

EOC (T-ALL/Refractory): Bone marrow

MRD

Initial Risk: Intermediate Risk

Final Risk

Diagnosis: B cell ALL

HEMATOLOGY CASE RECORD

Name: [illegible]

Age/Sex: 6y/M

Father's Name: [illegible] Ram

Date of Admission: 11/4/23

Address: [illegible] Agra, [illegible] [illegible], Agra, UP

Ph./Mob.: [illegible]

Blood Group ______ Weight 14.6kg Height 104cm Surface Area 0.62m²

Anthropometry: Wt/Age

14.6kg Ht/Age

104cm Wt/Ht

MUAC

SYMPTOMS (mention duration of each symptom)

Fever: × 7 days

Pallor: × 15 days

Skin bleeds

Epistaxis

Other bleeds

Lymphadenopathy

Bone pains

Joint pain

Eye Swelling

SIGNS

Pallor: (+)

Skin bleeds

Lymphadenopathy (size/ sites)

Joint swelling

Liver (cms) 5cm > mid-umbilicus yes/ no

Spleen (cms) 8cm > mid-umbilicus yes/no

Other lump(s)

Testes

Meningeal sings/Focal Neurological Deficit (−) (−)

Fundus

Resp System

CVS

Provisional/Clinical Diagnosis

[illegible]	[illegible]	Centre Details	[illegible]
[illegible]	[illegible]	Accession ID	[illegible]
[illegible]	[illegible]	Referred By	[illegible]
[illegible]	[illegible]	Report Date	[illegible]
[illegible]	[illegible]	Ref. No./TRF No.	[illegible]

DEPARTMENT OF MOLECULAR DIAGNOSTICS-I

The MLL-AF4 gene translocation, or t(4;11)(q21;q23) has been reported in 3-5% of pediatric and adult ALL patients. The presence of the translocation is an indicator of unfavourable prognosis.

Test Attributes and Limitations:

The analytical sensitivity of the assay ranges from 10^{-3} to 10^{-4} for each of the translocations studied. Samples must be received at the laboratory under appropriate conditions within 48hrs of aspiration to ensure preservation of RNA.

PCR is a highly sensitive technique; reasons for apparently contradictory results may be due to improper quality control during sample collection, selection of inappropriate specimen and/or presence of PCR inhibitors.

Note: This Test has been developed and its performance evaluated at Oncquest Laboratories Ltd.

[illegible]

*** End Of Report ***

[illegible]

[illegible] Oncquest Laboratories Ltd. [illegible] Gurugram

CHPC 1302/23

भारत सरकार/Govt. of India
कलावती सरन बाल चिकित्सालय, नई दिल्ली
KALAWATI SARAN CHILDREN'S HOSPITAL / NEW DELHI

KSCH 35

दैनिक शीट/DAILY SHEET

Patient's Name / आयु/Age / लिंग/Sex / Address / Doctor's Name / Occupation / Date and Time of Adm.	
2/4 ; 19/4/23	Alok 6y/M ; A – Acute ALL (Induction phase) ; Increased risk

तारीख Date	दैनिकी Daily	इलाज का आदेश Treatment Orders
	Kindly give double dose Hep A vaccination for pt	
		Adv. Inj Hepatitis A vaccine 1ml IM stat (0, 2, 6 weeks)
	20/4/23	Outside given
	Noted. Kindly advise regarding dosing (Hep A) — Dr Abhi PG-1	Dr Divy 9871752223 JR-2
	Inj Hep A Vaccine 1ml IM stat — Dr Abhi	

SPECIAL HEMATOLOGY LABORATORY

DEPARTMENT OF PATHOLOGY

LADY HARDINGE MEDICAL COLLEGE AND ASSOCIATED HOSPITALS, NEW DELHI

FLOW CYTOMETRY REPORT

LAB REFERENCE NO: 15/23 RMA: 235/23 DATE: 13/1/23

NAME	AGE/SEX	REG NO	HOSPITAL	UNIT	DOCTOR INCHARGE
[illegible]	6yr/M	[illegible]	RSCH	U2	

Type of specimen: Peripheral Blood Total cell count of sample: [illegible]

Percentage of gated population: 10 % Gating strategy: FSC VS SSC [illegible]

Intensity of CD45 expression on Gated population: dim – negative

MARKERS	RESULT	INTENSITY	INTERPREATATION
T CELL MARKERS			
cCD 3			Negative
CD5			Negative
CD7			Negative
sCD3			
CD4			
CD8			
CD1a			
B Cell Markers			
CD19	87%	moderate	Positive
CD79a	84%	moderate	Positive
CD10	87%	moderate-bright	Positive
CD22			Negative
CD20			
sIgM			
CD19 & CD10 coexpression	87%		
Myeloid markers			
CD13			
CD33			
CD14			
CD15			Negative
MPO			
Immaturity markers			
HLA –DR	32%	dim – moderate	Positive
CD34			Negative
CD117			Negative
TdT	35%	moderate	Positive

Name	[redacted]	Centre Origin	[redacted]
Age	[redacted]	Accession ID	[redacted]
Collection Date	[redacted]	Referred By	[redacted]
Received Date	[redacted]	Report Date	[redacted]
Registration Date	[redacted]	Ref. No./ OP No.	[redacted]

DEPARTMENT OF MOLECULAR DIAGNOSTICS-I

Acute Lymphoblastic Leukemia Translocation Panel

Acute Lymphoblastic Leukemia Translocation Panel (Qualitative)

Multiplex RTPCR & Gel Electrophoresis

Specimen type: EDTA Bone Marrow

TRANSLOCATION	STATUS OF TRANSLOCATION
t(9;22)(q34;q11)	Not detected
t(12;21)(p13;q22)	Not detected
t(1;19)(q23;p13)	Not detected
t(4;11)(q21;q23)	Not detected

Result:

The fusion transcripts for *BCR-ABL1, ETV6-RUNX1, E2A-PBX1* and *MLL-AF4* were not detected in the submitted specimen.

Interpretation:

This multiplex RTPCR assay addresses interrogation of the translocation status of the four major gene translocations of importance in Acute Lymphoblastic Leukemia. The analytical sensitivity of the assay ranges from 10^{-3} to 10^{-4} for each of the translocations studied.

The *BCR-ABL1* gene translocation, or t(9;22)(q34;q11) is found in more than 95% patients of CML, 5% patients of pediatric and 15-30% patients of adult B-ALLs. Detection of *BCR-ABL1* transcript establishes the diagnosis of CML and denotes an unfavorable prognosis in ALL. This Test detects the Major (M-*BCR*) and Minor (m-*BCR*) breakpoint fusion corresponding to p230 and p190kDa protein respectively.

The *ETV6-RUNX1* gene translocation, or t(12;21)(p13;q22) has been reported in 20-25% patients of pediatric pre B-ALL in the Caucasian race and 5-10% patients of pediatric pre ALL-B in the Indian population. The presence of this translocation is an indicator of favorable prognosis and longer DFS.

The *E2A-PBX1* gene translocation, or t(1;19)(q23;p13) has been reported in 3-6% of ALL patients and approx. 20-25% patients of pediatric pre B-ALL. The presence of the translocation is an indicator of unfavorable prognosis.

Dr. [redacted]
MD, [redacted]

Dr. [redacted]
MD, [redacted]
[redacted]

Page 1 of 2

OTHERS			
CD13			
CD11c			
CD56			
CD16			
GLYCOPHORIN			
CD61			

Impression:

Flow cytometric analysis reveals approximately 40 % of blast cells showing

Positive expression of CD10

Aberrant expression of CD19, CD79a, HLA-DR, TdT

Dim expression of

Negative for T cell markers and MPO

Co-expression of CD10 and CD19 (85%)

The stated parameter and antigenic distribution of peripheral blood bone marrow processed by flow cytometric study are suggestive of

CALLA positive B cell Acute lymphoblastic leukemia

Dr Srinivas

Dr Ref:

13/9/23

- HIV ____________________
- HBsAg ____________________
- HCV ____________________
- LFT: BIL T ___ D ___ I ___ SGOT ___ SGPT ___ ALP ___
- KFT ___ Urea ___ Creatinine ___ Uric Acid ___
- S Calcium ____________ Phosphorus ____________
- CXR
- Skeletal Survey
- USG Abdomen

- CT

- PET Scan

Others

- RISK ASSESSMENT
- Initial
- Age [illegible]
- WBC [illegible]
  [illegible]
- Bulky disease
- Liver [illegible]
- Spleen [illegible]
- LAP [illegible]
- [illegible]

- [illegible]
- [illegible]
- Risk category

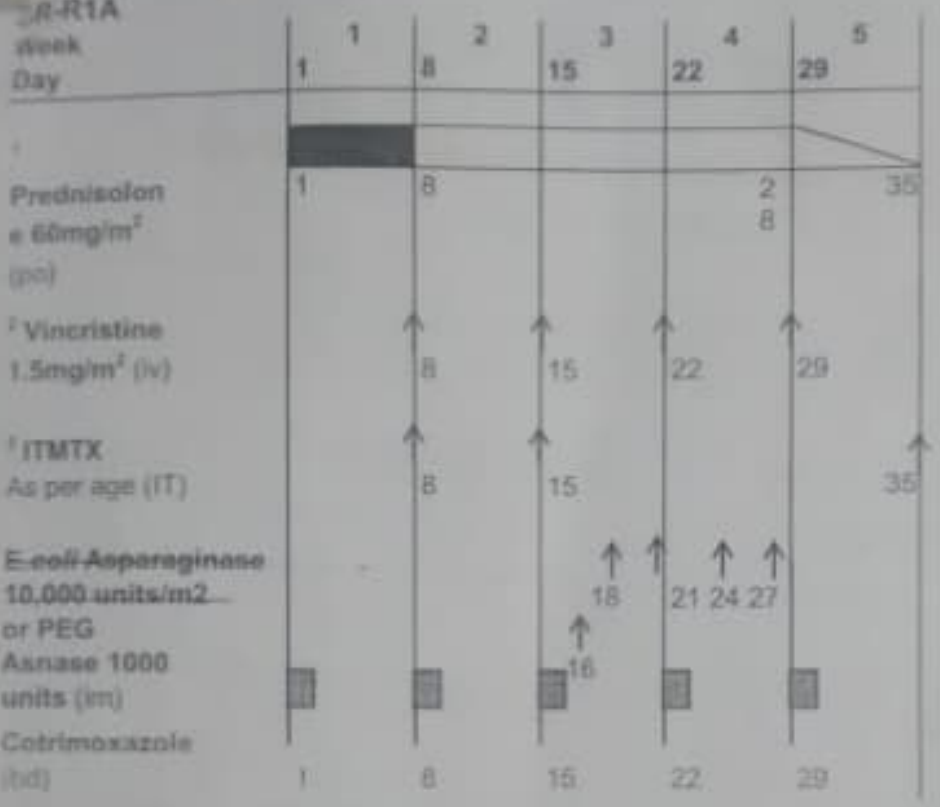
FINAL DIAGNOSIS ____________ (Sub type if any) ____________

- Date treatment started
- ALL Induction ([illegible]) ____________

- RISK ASSESSMENT (post induction)
- Final protocol ____________

Standard Risk, Induction Phase

SR-R1A



[1] **Prednisolone:** given in three divided doses

[2] **Vincristine:** maximum single dose of Vincristine is 2mg

[3] **Intrathecal Methotrexate:** <2 years= 6mg; 2-Less than 3 years= 10mg; ≥3 years= 12mg

D 8 peripheral smear		Cytogenetics	
D 8 CSF cytology		D 35 Bone marrow	

Basic Hematology Data (At admission)

- Hb ______ gm/dl
- TLC ______ /mm3
- DLC N ___ % L ___ % E ___ % M ___ % B ___ % Myelo ___ % Meta ___ %
Blasts ______ % nRBC ______ /100wbc
- Platelets ______ /mm3
- Smear
Exam ______

- BMA (No 78|11) — Report ______

- Morphological
Subtype ______
- Special Stains
- MPO [illegible]
- PAS
- Peroxidase
- Other
- Immunophenotyping CALLA positive B-ALL

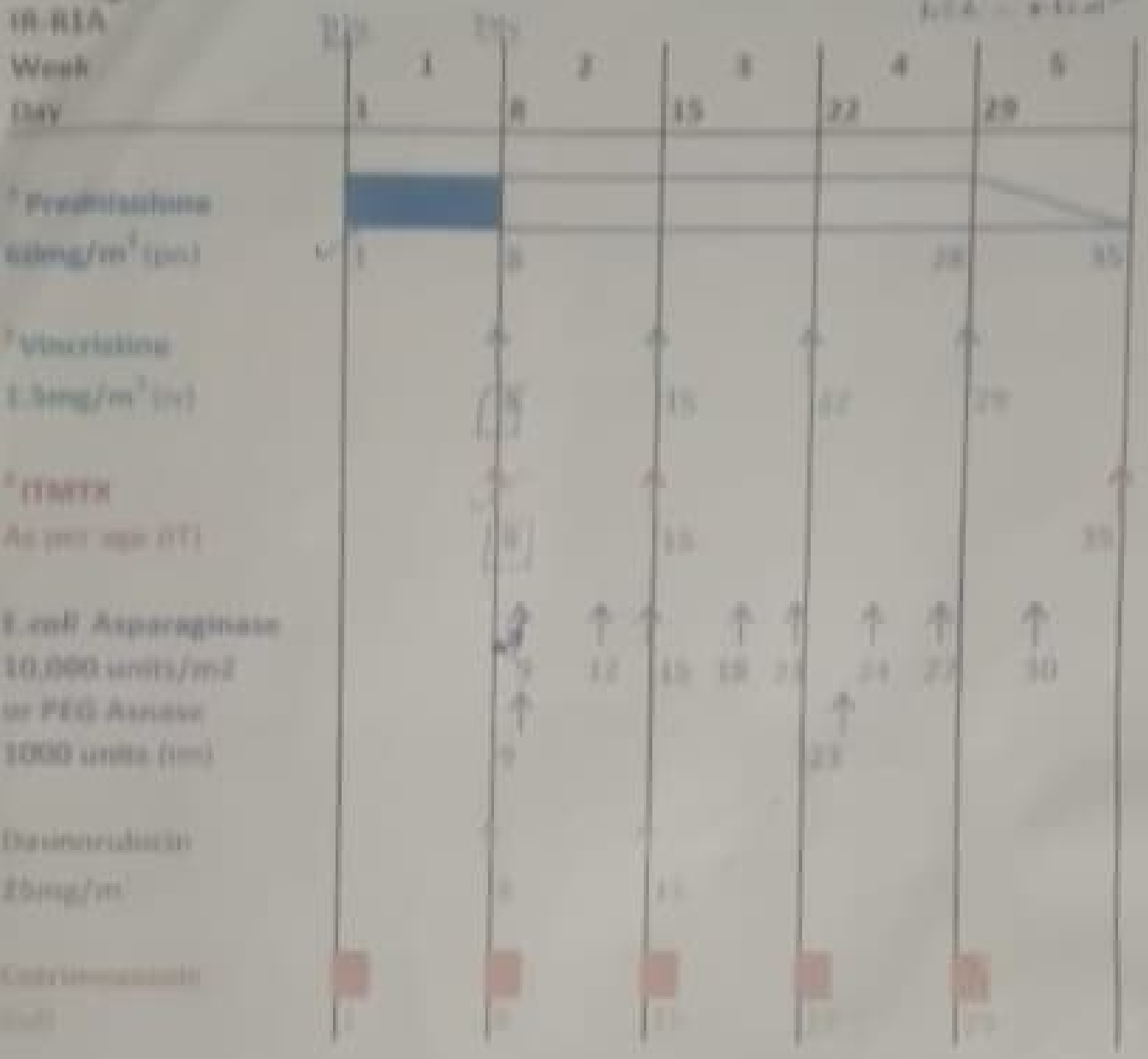
- Chromosomal studies
- Numerical
- Structural
- BCR-ABL (?) [illegible] not detected.
- BM biopsy (No) Imprint
report ______

- BM Biopsy
report ______

- CSF ______ CNS Status ______
- FNAC (No ______
) ______
- LN Biopsy (No ______
) ______
- D 8 PS blasts(exact number) ______
- D 14 marrow (write percentage of
blasts) ______
- **OTHER TESTS**
- Mx test negative

Intermediate Risk, Induction phase

IR RIA



[1] **Prednisolone:** given in three divided doses

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Sample No. 17/1764
Patient ID
Name
Sample Category

Ward   Rack 1   Position 7   12/04/2023 12:05:00 AM

Birth   Doctor   Sex

Nickname   XN-1500-1-8

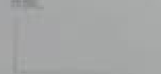
Positive
DIFF. Morph. Count

BMA - 235/22

Alok
Gyn/Male
10708

WBC	12.94	[10^3/uL]
RBC	7.84	[10^6/uL]
HGB	8.9	[g/dL]
HCT	25.2	[%]
MCV	82.9	[fL]
MCH	29.3	[pg]
MCHC	35.3	[g/dL]
PLT	38	[10^3/uL]
RDW-SD	58.8	[fL]
RDW-CV	20.8	[%]
PDW	----	[fL]
MPV	----	[fL]
P-LCR	----	[%]
PCT	----	[%]
NRBC	[illegible]	[10^3/uL]
NEUT	[illegible]	[10^3/uL]
LYMPH	[illegible]	[10^3/uL]
MONO	[illegible]	[10^3/uL]
EO	[illegible]	[10^3/uL]
BASO	[illegible]	[10^3/uL]
IG	[illegible]	[10^3/uL]
RET	[illegible]	[%]
IRF	[illegible]	[%]
LFR	[illegible]	[%]
MFR	[illegible]	[%]
HFR	[illegible]	[%]
RET-He	[illegible]	[pg]
IPF		[%]
WBC-BF		[10^3/uL]
RBC-BF		[10^6/uL]
MN		[10^3/uL]
PMN		[10^3/uL]
TC-BF#		[10^3/uL]

PS + BMA + MPO



WBC Abn Scattergram
Lymphocytosis
Monocytosis
IG Present
Blasts/Abn Lympho?
Atypical Lympho?

Anemia
RET Abn Scattergram

PLT Abn Distribution
Thrombocytopenia

MPO - Negative

[P/S]: Smear shows bicytopenia / leucocytosis. There is presence of 36% blasts. These are 2-2.5 times the size of small mature lymphocytes, having high N/C ratio with scant agranular cytoplasm with round nucleus with opened up chromatin, some 0-2 inconspicuous nucleoli. Few of these blasts show nuclear indentation & clefting.
RBC are predominantly normocytic normochromic.

DLC : Blast$_{35}$ Stab$_{04}$ N$_{28}$ L$_{31}$ M$_{01}$ Eo$_{01}$

2 nRBC/100 WBC

[BMA]: Bone marrow smears show no particles. Smears are highly cellular. There is presence of 75% blasts with morphology same as described in peripheral smear. Erythroid, myeloid & megakaryocytic series are suppressed.

Myelogram : Blast$_{75}$ My$_{01}$ Meta$_{02}$ Stab$_{02}$ N$_{08}$ L$_{08}$ nRBC$_{10}$

Imp: MPO Negative Acute Leukemia

Mob. : 9821233869

JEEVAN CARE FOUNDATION

Address:- 697, Village Madanpur Khadar, New Delhi 110076
Mail- Jeevancarefoundation@gmail.com

Reg No. 92

Ref. No. ..... Date .....

26-04-2023

सेवा में,

संस्थापक महोदय

जीवन केयर फॉउंडेशन

दिल्ली

महोदय, मैं कीर्ति राम आलोक का पिता आपके संस्था से आवेदन करता हूँ की हमारे बच्चे को जीवन दान दे। हमारा बच्चा ब्लड कैंसर से पीड़ित है। इसका स्वास्थ्य प्रतिदिन बिगड़ता ही जा रहा है। कैंसर ऐसा बिमारी है जो की रोगी को जल्दी नजदीक से खत्म कर देता है।

कृपया करके हमारे बच्चे का आर्थिक रूप से सहायता करें। आपका सहायता बहुत ज्यादा महत्वपूर्ण है। आपके सहायता से हमारे बच्चे का जीवन बच सकता है।

आपका आभारी

कीर्ति राम

JEEVAN CARE FOUNDATION Reg No. DELHI

Request Accepted.